Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A membrane electrode unit for electrochemical equipment, comprising an ionically conductive membrane with a front side and back side, a first catalyst layer on the front side of the membrane, a first gas distributor substrate associated with the front side of the membrane and the first catalyst layer, a second catalyst layer on the back side of the membrane, and a second gas distributor substrate associated with the back side of the membrane and the second catalyst layer, wherein the first gas distributor substrate has ~~surface~~ size dimensions smaller than those of the ionically conductive membrane and the second gas distributor substrate has ~~surface~~ size dimensions substantially equal to those of the ionically conductive membrane, and wherein a portion of the front side of the ionically conductive membrane is not supported by the first gas distributor substrate.

2. (currently amended) A membrane electrode unit according to claim 1, wherein the catalyst layer on the front side and the catalyst layer on the back side of the ionically conductive membrane have different ~~surface~~ size dimensions.

3. (currently amended) A membrane electrode unit according to claim 1, wherein the catalyst layer on the front side and the catalyst layer on the back side of the ionically conductive membrane have the same ~~surface~~ size dimensions.

4. canceled.

5. (original) A membrane electrode unit according to claim 1, wherein the catalyst

layers on the front side and on the back side contain catalysts containing noble metals and optionally ionically conductive materials.

6. (original) A membrane electrode unit according to claim 1, wherein the ionically conductive membrane comprises organic polymers, such as proton-conducting perfluorinated polymeric sulfonic acid compounds, doped polybenzimidazoles, polyether ketones, polysulfones or ionically conducting ceramic materials, and has a thickness of 10 to 200 μm.

7. (original) A membrane electrode unit according to claim 1, wherein the gas distributor substrate comprises porous electrically conductive materials containing carbon fiber paper, carbon fiber nonwoven cloth, carbon fiber cloth, metal mesh, metallized fiber cloth, or combination thereof.

8. (previously presented) A membrane electrode unit according to claim 1, wherein an edge of the first gas distributor substrate and the portion of the front side of the ionically conductive membrane not supported by the first gas distributor substrate are surrounded by a sealing material.

9. (previously presented) A membrane electrode unit according to claim 8, wherein the sealing material impregnates an edge region of the first gas distributor substrate to a depth of at least 1 mm.

10. (previously presented) A membrane electrode unit according to claim 8, wherein the sealing material comprises a thermoplastic polymer selected from the group consisting of polyethylene, polypropylene, polytetrafluoroethylene, PVDF, EPDM, polyester, polyamide, polyamide elastomers, polyirnide, polyurethane, silicone, silicone elastomers, and combinations thereof or a thermosetting polymer selected from the group consisting of epoxides, cyanoacrylates and combinations thereof.

11. (original) A membrane electrode unit according to claim 8, wherein the sealing material is integrally combined with another peripheral plastic frame.

12. (original - withdrawn) A process for producing a membrane electrode unit according to claim 1, comprising combining two catalyst-coated gas distributor substrates with the front and back sides of an ionically conductive membrane.

13. (original - withdrawn) A process for producing a membrane electrode unit according to claim 1, comprising combining two gas distributor substrates which are not catalyst-coated with the front and back sides of an ionically conductive membrane coated with catalyst on both sides.

14. (previously presented - withdrawn) A process for producing a membrane electrode unit according to claim 8, wherein the portion of the front side of the ionically conductive membrane not supported by the first gas distributor substrate is brought directly into contact with a sealing material.

15. (original - withdrawn) A process for producing a membrane electrode unit according to claim 14, wherein the sealing material is cured by elevated pressure and elevated temperature or by contact with air moisture and/or elevated temperature.

16. (previously presented) A cell stack for electrochemical equipment comprising the membrane electrode unit according claim 1.

17. (previously presented) A fuel cell for electrochemical equipment comprising the membrane electrode unit according to claim 1.